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| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | ATTORNEY'S DOCKET NUMBER 2072.0010009/MAC/SJE |
|---|---|
| | U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/551775 to be assigned |

| INTERNATIONAL APPLICATION NO. PCT/US2004/013031 | INTERNATIONAL FILING DATE 29 April 2004 | PRIORITY DATE CLAIMED April 29, 2003 |
|---|---|---|

TITLE OF INVENTION
Molecular Detection Systems Utilizing Reiterative Oligonucleotide Synthesis

APPLICANT(S) FOR DO/EO/US
Hanna, Michelle M.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.

2. [ ] This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.

3. [ ] This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.

4. [X] The US has been elected (Article 31).

5. [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2))

    a. [ ] is attached hereto (required only if not communicated by the International Bureau).

    b. [ ] has been communicated by the International Bureau.

    c. [X] is not required, as the application was filed in the United States Receiving Office (RO/US).

6. [ ] An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).

    a. [ ] is attached hereto.

    b. [ ] has been previously submitted under 35 U.S.C. 154(d)(4).

7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))

    a. [ ] are attached hereto (required only if not communicated by the International Bureau).

    b. [ ] have been communicated by the International Bureau.

    c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.

    d. [X] have not been made and will not be made.

8. [ ] An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).

9. [X] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

10. [ ] An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. [X] An Information Disclosure Statement under 37 CFR 1.97 and 1.98.

12. [ ] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

13. [X] A preliminary amendment.

14. [X] An Application Data Sheet under 37 CFR 1.76.

15. [ ] A substitute specification.

16. [ ] A power of attorney and/or change of address letter.

17. [X] A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.

18. [ ] A second copy of the published International Application under 35 U.S.C. 154(d)(4).

19. [ ] A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

| U.S. APPLICATION NO. (if known, see 37 CFR 1.5) | INTERNATIONAL APPLICATION NO. | ATTORNEY'S DOCKET NUMBER |
|---|---|---|
| *To be Assigned* 10/551775 | PCT/US2004/013031 | 2072.0010009/MAC/SJE |

**20.** Other items or information:

Authorization to Treat Reply as Incorporating an Extension of Time under 37 C.F.R. § 1.136(a)(3)
Substitute Sequence Listing
12 pages of the Substitute Sequence Listing

| The following fees have been submitted | CALCULATIONS | PTO USE ONLY |
|---|---|---|
| 21. [X] Basic national fee (37 CFR 1.492(a))...................................................... $300 | $ 300.00 | |
| 22. [X] Examination fee (37 CFR 1.492(c))<br><br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)............. $0<br>All other situations........................................................................................$200 | $ 200.00 | |
| 23. [X] Search fee (37 CFR 1.492(b))<br>If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)................. $0<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority....................................................$100<br>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.................................................... $400<br>All other situations........................................................................................$500 | $ 100.00 | |
| TOTAL OF 21, 22 and 23 = | 600.00 | |

| [X] Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br>The fee is **$250** for each additional 50 sheets of paper or fraction thereof. | | |
|---|---|---|

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE | | |
|---|---|---|---|---|---|
| 233 - 100 = | 133 /50 = | 3 | x $250 | $ 750.00 | |

| Surcharge of **$130.00** for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). | $ 0.00 | |
|---|---|---|

| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | $ | |
|---|---|---|---|---|---|
| Total claims | 20 - 20 = | 0 | x $50 | $ 0.00 | |
| Independent claims | 10 - 3 = | 7 | x $200 | $ 1,400.00 | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + $360 | $ 0.00 | |
| TOTAL OF ABOVE CALCULATIONS = | | | | $ 2,750.00 | |

| [X] Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. | | |
|---|---|---|
| SUBTOTAL = | $ 1,375.00 | |

| Processing fee of **$130.00** for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). + | $ | |
|---|---|---|
| TOTAL NATIONAL FEE = | $ 1,375.00 | |

| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property + | $ | |
|---|---|---|
| TOTAL FEES ENCLOSED = | $ 1,375.00 | |
| | Amount to be refunded: | $ |
| | Amount to be charged | $ |

**10/ 551775**

a. ☐ A check in the amount of $ _____ to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit
Account No. __19-0036__ . A duplicate copy of this sheet is enclosed.

d. ☒ Fees are to be charged to a credit card. **WARNING: Information on this form may become public. Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed
and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

CUSTOMER NUMBER    26111

_____
SIGNATURE

Simon J. Elliott
_____
NAME

54,083
_____
REGISTRATION NUMBER

**10/ 551775**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|---|---|
| In re application of: | Confirmation No.: *To be assigned* |
| Michelle M. Hanna | Art Unit: *To be assigned* |
| Appl. No.: *To be assigned* (U.S. National Phase of PCT/US2004/013031; Int'l Filing Date: April 29, 2004) | Examiner: *To be assigned* |
| Filed: *Herewith* | Atty. Docket: 2072.0010009/MAC/SJE |
| For: **Molecular Detection Systems Utilizing Reiterative Oligonucleotide Synthesis** | |

## Authorization to Treat a Reply as Incorporating an Extension of Time Under 37 C.F.R. § 1.136(a)(3)

Commissioner for Patents
PO Box 1450
Alexandria, VA  22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time.   The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

*A Elliott*

Simon J. Elliott
Agent for Applicant
Registration No. 54,083

Date: *October 3, 2005*
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